In the Claims

1. (Currently amended) A chest compression apparatus comprising

a) a mechanism for applying a force to the thoracic region of a person, the mechanism comprising a bladder for receiving a stream of pressurized air, and

b) a mechanism comprising a motor-driven rotating blade adapted to periodically interrupt the ~~air stream supplying pressure pulses of~~ stream of pressurized air to the bladder ; ~~wherein the pulses have~~ in order to provide pressure pulses having a substantially sinusoidal wave form that comprises a fast rise sine wave ~~at any frequency between 6 and 15 Hz~~ when applied at a frequency of 6 Hz.

2. (Original) An apparatus according to claim 1 further comprising a mechanism for venting the pressurized air from the bladder.

3. (Original) An apparatus according to claim 1 wherein the apparatus comprises a plurality of components, including an air flow generator component, a pulse frequency control component, a pressure control component, and a patient vest, wherein the pulse frequency control and pressure control components can, independently, be used by the patient and/or can be preset and determined by the manufacturer or physician so as to deliver compression pulses having substantially sinusoidal wave forms.

4. (Currently amended) A chest compression apparatus according to claim 1, comprising:

a) an air flow generator component adapted to provide a continuous stream of pressurized air,

b) a pulse frequency control component in flowable communication with the air flow generator ~~and comprising a motor-driven rotating blade adapted to periodically interrupt the air stream in order to provide pulses having a substantially sinusoidal wave form~~, and

c) a patient vest adapted to be worn by a user in order to receive the pulses in the form of corresponding force applied to the thoracic region.

5. (Original) An apparatus according to claim 4 further comprising a pressure control component in flowable communication with the pulse frequency control component and adapted to permit a user to control the pressure of the pulses.

6. (Original) An apparatus according to claim 4 wherein the apparatus is provided in the form of a plurality of portable modules having a combined weight of about 20 pounds or less.

7. (Original) An apparatus according to claim 6 wherein the apparatus modules have a combined weight of 15 pounds or less.

8. (Original) An apparatus according to claim 1 wherein the apparatus provides a maximum pressure of about 60 mm Hg or less.

9. (Currently amended) An apparatus according to claim 1 wherein the <u>rotating blade</u> [valve] is used to establish and determine the rate and duration of air pulses entering the bladder.

10. (Currently amended) A chest compression apparatus <u>according to claim 1, further</u> comprising

~~a) a mechanism for applying a force to the thoracic region of a person, the mechanism comprising a bladder for receiving pressurized air, and~~

~~b) a mechanism comprising a motor-driven rotating blade adapted to periodically interrupt the air stream supplying pressure pulses of pressurized air to the bladder, wherein the pulses in order to provide pressure pulses having a substantially sinusoidal wave form,~~

~~c) and~~ a mechanism for venting the pressurized air from the bladder,

wherein the apparatus is provided in the form of a plurality of portable modules having a combined weight of about 20 pounds or less and provides a maximum pressure of about 60 mm Hg or less, wherein the wave form comprises a fast rise, sine wave when applied at a frequency of 6 Hz ~~at any frequency between 6 and 15 Hz~~.

11. (Original) A method of applying a force to the thoracic region of a person comprising the steps of providing and using an apparatus according to claim 1.

12. (Currently amended) A method of making a chest compression apparatus, comprising the steps of providing and/or combining:

a) a mechanism for applying a force to the thoracic region of a person, the mechanism comprising a bladder for receiving pressurized air, and

b) a mechanism comprising a motor-driven rotating blade adapted to periodically interrupt the air stream supplying pressure pulses of pressurized air to the bladder, wherein the pulses having a substantially sinusoidal wave form,

c) and a mechanism for venting the pressurized air from the bladder, wherein the wave form comprises a fast rise, sine wave when applied at a frequency of 6 Hz ~~at any frequency between 6 and 15 Hz~~.

13. (Original) An apparatus according to claim 1 further comprising a mechanism for venting the pressurized air from the bladder, wherein the apparatus comprises a plurality of components, including an air flow generator component, a pulse frequency control component, a

pressure control component, and a patient vest, wherein the pulse frequency control and pressure control components can, independently, be used by the patient and/or can be preset and determined by the manufacturer or physician so as to deliver compression pulses having substantially sinusoidal wave forms.

14. (Currently amended) A chest compression apparatus according to claim 13, comprising:

a) an air flow generator component adapted to provide a continuous stream of pressurized air,

b) the mechanism comprising a blade further comprises a pulse frequency control component in flowable communication with the air flow generator ~~and comprising a motor-driven rotating blade adapted to periodically interrupt the air stream in order to provide pulses having a substantially sinusoidal wave form~~, and

c) a patient vest adapted to be worn by a user in order to receive the pulses in the form of corresponding force applied to the thoracic region.

15. (Original) An apparatus according to claim 14 further comprising a pressure control component in flowable communication with the pulse frequency control component and adapted to permit a user to control the pressure of the pulses.

16. (Original) An apparatus according to claim 15 wherein the apparatus modules have a combined weight of 15 pounds or less and the apparatus provides a maximum pressure of about 60 mm Hg or less.

17. (Previously presented) An apparatus according to claim 16 wherein the rotating blade is used to establish and determine the rate and duration of air pulses entering the bladder.

18. (Original) A method of applying a force to the thoracic region of a person comprising the steps of providing and using an apparatus according to claim 13.

19. (Original) A method according to claim 18 wherein the apparatus modules have a combined weight of 15 pounds or less and the apparatus provides a maximum pressure of about 60 mm Hg or less.

20. (Previously presented) A method according to claim 19 wherein the rotating blade is used to establish and determine the rate and duration of air pulses entering the bladder.

Add new claims 21-40 as follows:

21. (new) An apparatus according to claim 1 wherein the pulses include one or more minor perturbations or fluctuations within and/or between individual waves.

22. (new) An apparatus according to claim 3 wherein the pulse frequency control component is programmed and controlled electronically to allow for the automatic timed cycling of frequencies.

23. (new) An apparatus according to claim 22 wherein the control provides the option of manual override at any frequency.

24. (new) A method according to claim 12 wherein the apparatus comprises a plurality of components, including an air flow generator component, a pulse frequency control component, a pressure control component, and a patient vest, wherein the pulse frequency control and pressure control components can, independently, be used by the patient and/or can be

preset and determined by the manufacturer or physician so as to deliver compression pulses having substantially sinusoidal wave forms.

25. (new) A method according to claim 12 wherein the apparatus comprises

a) an air flow generator component adapted to provide a continuous stream of pressurized air,

b) a pulse frequency control component in flowable communication with the air flow generator, and

c) a patient vest adapted to be worn by a user in order to receive the pulses in the form of corresponding force applied to the thoracic region.

26. (new) A method according to claim 25 wherein the apparatus further comprises a pressure control component in flowable communication with the pulse frequency control component and adapted to permit a user to control the pressure of the pulses.

27. (new) A method according to claim 12 wherein the apparatus is provided in the form of a plurality of portable modules having a combined weight of about 20 pounds or less.

28. (new) A method according to claim 27 wherein the apparatus provides a maximum pressure of about 60 mm Hg or less.

29. (new) A method according to claim 12 wherein the pulses include one or more minor perturbations or fluctuations within and/or between individual waves.

30. (new) A method according to claim 12 wherein the pulse frequency control component is programmed and controlled electronically to allow for the automatic timed cycling of frequencies.

31. (new) A method according to claim 11 wherein the apparatus further comprises a mechanism for venting the pressurized air from the bladder.

32. (new) A method according to claim 11 wherein the apparatus comprises a plurality of components, including an air flow generator component, a pulse frequency control component, a pressure control component, and a patient vest, wherein the pulse frequency control and pressure control components can, independently, be used by the patient and/or can be preset and determined by the manufacturer or physician so as to deliver compression pulses having substantially sinusoidal wave forms.

33. (new) A method according to claim 11 wherein the apparatus comprises

a) an air flow generator component adapted to provide a continuous stream of pressurized air,

b) a pulse frequency control component in flowable communication with the air flow generator, and

c) a patient vest adapted to be worn by a user in order to receive the pulses in the form of corresponding force applied to the thoracic region.

34. (new) A method according to claim 33 further comprising a pressure control component in flowable communication with the pulse frequency control component and adapted to permit a user to control the pressure of the pulses.

35. (new) A method according to claim 33 wherein the apparatus is provided in the form of a plurality of portable modules having a combined weight of about 20 pounds or less.

36. (new) A method according to claim 35 wherein the apparatus modules have a combined weight of 15 pounds or less.

37. (new) A method according to claim 11 wherein the apparatus provides a maximum pressure of about 60 mm Hg or less.

38. (new) A method according to claim 11 wherein the rotating blade is used to establish and determine the rate and duration of air pulses entering the bladder.

39. (new) A method according to claim 11 wherein the pulses include one or more minor perturbations or fluctuations within and/or between individual waves.

40. (new) A method according to claim 32 wherein the pulse frequency control component is programmed and controlled electronically to allow for the automatic timed cycling of frequencies.